

## **REMARKS**

The invention as claimed by the Applicants includes numerous limitations not disclosed by the art cited in the Office Action. To reject Applicants' claims, the Office Action must cite prior art that discloses each and every specific claim limitation. MPEP 706.02 provides that "for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention." U.S. Patent 3,159,384 ("Davis") and U.S. Patent 1,866,531 ("Harding") fail to teach or imply all of the limitations claimed by the Applicants. To the extent that the Examiner is asserting "common knowledge" or official notice, Applicants respectfully request that the Examiner provide an actual reference or a duly executed affidavit pursuant to MPEP 2144.03.

### **I. SPECIFICATION INFORMALITIES**

As requested in the Office Action, paragraph [0076] of Applicants' Specification has been amended to include equivalent values in kilograms (kg).

### **II. 35 USC §112**

Several claims were rejected on the basis of 35 USC §112. All of the referenced claims have been amended, and the Applicants hereby traverse those rejections.

#### **A. Claim 16: first paragraph of 35 USC §112**

Applicants' Specification discloses sound volume information for the apparatus "in an uncovered state" [paragraphs 0045 – 0049] as well as "in a covered state" [paragraphs 0050-0054]. As provided in Paragraph 0022, "Figure 2 is a side view of an example of the shaker apparatus 10 with the base housing 12 omitted." One of ordinary skill in the art would easily conclude that the "cover" refers to the base housing 12 which is present in Figure 1 and absent in Figure 2. Claim 16 has been amended to specifically include a reference to the "cover." The source of the noise is the apparatus, more specifically the motion and motor of the apparatus.

Claim limitations relating to decibel sound levels are allowable by the USPTO. Since 1976, the USPTO has issued more than 900 patents that include decibel levels as a claim limitation. See Attachment A. The USPTO issues patent claims that are specific to particular to decibel levels even though sound can be impacted by the surrounding environment, such as a vacuum, water, air, other obstacles, etc. The fact that no decibel level of noise can be produced in a vacuum environment such as outer space does not invalidate the more than 900 patents identified in Attachment A. The fact that the Applicants' claims can be implemented in a variety of different embodiments does not mean that a specific sound-based limitation must be associated with a specific individual claim limitation. The sound-based data was captured through the actual usage of a prototype apparatus. The noise generated by the claimed apparatus is

generated by the cumulative effect of the moving parts of the apparatus. That apparatus is fully described in the Specification. The fact that the claimed apparatus, like any other apparatus, can be placed into different environments that may impact its performance, does not mean that the Applicants' claims are deficient pursuant to the first paragraph of 35 USC § 112.

**B. Claims 5-6: second paragraph of 35 USC §112**

Although Claim 5-6 were rejected "under 35 USC 112 second paragraph" the Office Action provided no reasoning as to the rejection (see page 3 of the Office Action). Such a rejection requires more than simply the statement of a conclusion, and thus the Office Action fails to satisfy the burden placed on the Examiner to reject a Claim submitted by the Applicant.

The contents of Claim 6 have been added to Claim 5, and Claim 6 has been cancelled. As amended, Claim 5 sets forth specific limitations relating to a tilting motion, and the relative direction of the tilting motion to other elements of the apparatus.

**B. Claim 13: second paragraph of 35 USC §112**

Claim 13 has been amended to include "dynamic" motion (e.g. non-repetitive motion) which has the characteristic of not causing separation in the contents of what is being shaken. The Applicants nonetheless traverse the rejection in the Office Action.

All of the apparatus limitations relating to motion contribute to and facilitate the overall and aggregate effect of non-repetitive motion (in both vertical and horizontal planes) that actively prevents separation in the contents of what is being shaken. There is no requirement that a single specific structural element be tied to the "does not cause separation of contents" element. In fact, one of the purposes of the entire apparatus is to avoid causing the contents to separate. If such an apparatus could be built using a single component, the Applicants' would have done so.

In summary, the "does not cause separation of contents" element is the result of the shaking motion of the apparatus, and the shaking motion of the apparatus is the result of the components as claimed by the Applicants.

**C. Claim 16: second paragraph of 35 USC §112**

There is no requirement under patent law that prevents a claim limitation from being associated with multiple claim elements collectively. The noise limitation relates collectively to all of the moving parts in the apparatus. As discussed above, Applicants' Specification discloses sound volume information for the apparatus "in an uncovered state" [paragraphs 0045 – 0049] as well as "in a covered state" [paragraphs 0050-0054]. As provided in Paragraph 0022, "Figure 2 is a side view of an example of the shaker apparatus 10 with the base housing 12 omitted." One of ordinary skill in the art would

easily conclude that the “cover” refers to the base housing 12 which is present in Figure 1 and absent in Figure 2. Claim 16 has been amended to specifically include a reference to the “cover.” The source of the noise is the apparatus, more specifically the motion and motor of the apparatus.

**D. Claim 19: second paragraph of 35 USC §112**

This claim has been re-written to provide a proper antecedent basis.

**III. 35 USC §102 Rejections**

**A. Harding**

Claims 1-10, 12-13, 23-24, and 26-46 were rejected under 35 USC 102(b) as being anticipated by Harding. As amended, these claims include elements not disclosed by Harding.

**1. Vertical movement that is not de minimis**

The Office Action acknowledges that Harding does not expressly teach vertical motion. The motion taught by Harding occurs in the horizontal plane. The Office Action asserts that there must be “some flexure” resulting in presumably some vertical motion. While this assertion may be true at some level of quantum analysis, the Applicants disagree that such de minimus flexing is cognizable for the purposes of claim analysis. Claim 1 has been amended to include the limitation where the vertical motion component is not de minimis.

Applicants’ invention purposely includes both vertical and horizontal motion. Any vertical motion in Harding is by accident, and de minimis. The “not de minimis” limitation is included in claim 1, so claim 1 and all claims that depend on claim 1 are in condition for allowance.

**2. Tilting motion**

Harding does not disclose or imply any tilting motion. Claims 5, 23, 39, and their respective dependent claims are in condition for allowance.

**3. Material composition**

Harding does not teach a base housing made of plastic that includes a rubber base pad, a motor mount made of steel, and a cam made of brass. Thus, claim 7 is in condition for allowance.

**4. Liquid contents**

Harding does not teach an apparatus suitable for mixing liquid contents. To the contrary, Harding teaches the separation of solid contents. Harding uses a mesh screen to sift sand. Claims 12, 18, and 19 are in condition for allowance.

### **5. Non-screw retaining mechanism**

The “retaining mechanism” in Harding is a screw. It is not an elastic band, a rubber band, or a spring. Nor is a screw a retaining band. Claims 9 and 17 are in condition for allowance.

### **6. Does not cause separation**

The purpose of Harding is to sift sand, e.g. separate sand from other items in the sand. Harding does not teach motion designed to prevent separation of the shaken contents. Claim 12 is in condition for allowance.

### **7. 3 oz bottle**

Harding uses a mesh screen to sift sand. Harding cannot be said to teach the limitation of shaking multiple containers, much less containers or any particular size. Claims 14 and 18 are in condition for allowance.

### **8. Mass limitations**

Harding does not teach any mass limitations. Claims 15 and 20 are in condition for allowance.

### **9. Sound limitations**

Harding does not teach any sound limitations. Claim 16 is in condition for allowance.

### **10. Power source**

Harding provides no teachings with respect to power sources. Claims 21 and 22 are in condition for allowance.

## **B. Davis**

Claims 1-10 and 23-46 were rejected under 35 USC 102(b) as being anticipated by Davis. As amended, these claims include elements not disclosed by Davis. Previous arguments by the Applicants lumped Davis and Harding together. In this Amendment, each is addressed individually.

### **1. Vertical movement that is not de minimis**

The Office Action acknowledges that Davis does not expressly teach vertical motion. The motion taught by Davis occurs in the horizontal plane. The Office Action asserts that there must be “some flexure” resulting in presumably some vertical motion. While this assertion may be true at some level of quantum analysis, the Applicants disagree that such de minimis flexing is cognizable for the purposes of claim analysis. Claim 1 has been amended to include the limitation where the vertical motion component is not de minimis.

Applicants' invention purposely includes both vertical and horizontal motion. Any vertical motion in Davis is by accident, and de minimis. The "not de minimis" limitation is included in claim 1, so claim 1 and all claims that depend on claim 1 are in condition for allowance.

## **2. Tilting motion**

Davis does not disclose or imply any tilting motion. All motion is parallel to the base of the device. Claims 5, 23, 39, and the their respective dependent claims are in condition for allowance.

## **3. Material composition**

Davis does not teach a base housing made of plastic that includes a cam made of brass. Thus, claim 7 is in condition for allowance.

## **4. Non-screw retaining mechanism**

The "retaining mechanism" in Davis is a spring (see Column 3, Line 53) not a retaining band such as an elastic or rubber band. Claim 17 is in condition for allowance.

## **5. Mass limitations**

Davis does not teach any mass limitations. Claims 15 and 20 are in condition for allowance.

## **6. Sound limitations**

Davis does not teach any sound limitations. Claim 16 is in condition for allowance.

## **IV. 35 USC §103 Rejections**

A rejection pursuant to 35 USC §103 requires that the Examiner cite references with respect to each and every claim element of the rejected claim. As discussed above, many of the Applicants' claim elements are not taught by the cited references. The tilting of the Applicants' apparatus is not taught by either of the cited references. The use of a restraining band, such as a rubber band or an elastic band, is not taught by either of the cited references. The weight and noise limitations are not taught by either of the cited references. To the extent that the Examiner is asserting common knowledge or official notice, Applicants respectfully request that the Examiner provide an actual reference or a duly executed affidavit pursuant to MPEP 2144.03.

The cited references affirmatively teach away from each other and the Applicants' claims. The Applicants' apparatus is designed to be portable and relatively quiet mechanism to shake nail polish. Neither of the cited references relate to consumer-oriented applications. With respect to a portable nail polish shaker and other consumer-oriented applications, Applicants' claims are not properly rejected on grounds of obviousness. None of the cited references teach an apparatus that allows a person to

travel with a nail polish shaker that is quiet, light-weight, and prevents the nail polish from separating. In this context, the size of the containers, the mass of the apparatus, the lack of noise generated by the apparatus, and the functionality of not separating the nail polish into various chemical components are not trivial and are not properly classified as a mere change in size.

Neither of the two cited references individually solves the problems addressed by the Applicants' claims. Even collectively, the two cited references fail to solve the problems addressed by the Applicants' claims. Thus, the two cited references cannot be construed as an obvious solution for a quiet portable nail polish shaker that will not cause nail polish to separate into different chemical compositions.

## **CONCLUSION**

Applicants believe that all claims as amended are in condition for allowance. If the Examiner disagrees with that conclusion, **Applicants hereby request a telephone interview with the Examiner to discuss any outstanding issues.** Before conducting such an interview, the Applicants would propose sending a video of the apparatus and its motion-based attributes to the Examiner in preparation for the interview.

The shaking motion of the Applicants' apparatus is not disclosed in the cited art.

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Respectfully submitted,

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By \_\_\_\_\_

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